Solid Endgame Knowledge

In the endgame, everybody makes mistakes! It’s partly because of the modern-day time-control, that condemns players to perpetual time-scrambles in the endgame; and it’s partly because, in our day, the overwhelming majority of masters and grandmasters have gone crazy studying openings, and pay almost no attention to rounding out any other phase of their game. And that’s sad, because knowing endgame theory not only prevents a player from making elementary endgame blunders, but also aids in the growth of their overall understanding of the game, and heightens the class of their play.

Of course, all endgame problems are far from being elementary in nature; at times, we must put forth a great deal of effort in order to unlock a position’s secrets. On the other hand, the difficult, subtle solutions are, as a rule, still based upon well-known theoretical ideas and standard techniques. Solid endgame knowledge may not guarantee that you’ll always find the right move, but at least it will increase your chances of success.

After deep analysis of an endgame played in the European Championship of 2009, I came to some rather interesting and instructive conclusions that I would now like to share with my readers.

Grachev – Navara
Budva 2009

After the obvious moves 48.Rxg4 Rxf2 49.Kd5 Kc7 50.Ke6 (White gives the opposing king a “shoulder block,” preventing the latter from reaching the king’s wing), the position is most likely a win. But under tournament conditions, with the endgame tablebases temporarily inaccessible, this assessment would not seem obvious even to very strong grandmasters.

Note that Black is not obliged to take the f2-pawn: 48...Kc6 49.Rf4 Kd6 50.Ke4 Ke6 would be worth considering. This particular position with f- and h-pawns would also be hard to evaluate. Such positions are mostly drawn, but here the king is cut off on the f-file, and it’s hard to tell whether this circumstance would consign Black to defeat, or whether he might still defend.

And finally, it’s important to note the possibility of transposing moves, in order to rule out Black’s ability to reach the f- and h-pawn endgame: 48. Kd5 Rxf2 (on 48...Kc7, the simplest reply is 49.Ke6, although White also has 49.h5) 49.Rxg4. Logically, this has to be the most accurate continuation. On the other hand, in a practical game situation, it sometimes makes sense to leave your opponent a choice. First of all, he will have to expend valuable time; and second, it gives him a chance to make a mistake (if it turns out that the situation with one extra pawn is drawn, while the one with two is a win).

As you can see, the decision Boris Grachev had to make was far from obvious. In the actual game, he either guessed wrong, or else he simply failed to notice the favorable transposition of moves.

48.Rxg4?

Every tempo has value here. The waiting move 51...Rh1? would render his opponent’s task much easier: 52.Kf6 Kc6 53.Kg6 Rg1+ (53...Ke5 54.Kh6. White continues by advancing king and pawn as far as possible, followed by bringing the rook to g8, letting the king out of its prison. Now if the black king were cut off on the e-file instead, this plan would not work, since in the time it took the rook to get to g8, the black king would arrive at f7.

The position under discussion should be part of every chessplayer’s endgame arsenal. You will find it in my Endgame Manual, in Diagrams 9-34 and 9-35.

51...Kc6!

Here straightforward play lets the win slip: 52.Kf6? Kc5 53.Rg4 Kd6! 54.Kg6 Ke7 55.h5 Kf8 =. The black king gets back to the kingside in time.

A rather unexpected strategy leads to the goal. White must gradually force the opposing king to the edge of the board. Then, thanks to the threat of mate, White will be able to win the deciding tempo.

52.Rc4+! Kb5 53.Kd5 Rh1 54.Rg4 Kb6

Nothing is changed by 54...Rh2 55.Kd6! (threatening 56.Rg5+ and 57.h5) 55...Kb6 56.Rb4+.

55.Kd6 Kb7 (55...Kb5 56.Rg5+ and 57.h5) 56.Re4

Now we have the same situation we reached in the last previous diagram. On 56...Rh2, 56.Ke6 is decisive, so Black must keep his king close to the rook, allowing himself to be pushed further back.

56...Kb6 57.Rb4+! Ka5 58.Ke5 Rh2 59.Rg4 Ka6 (59...Rh1 60.Kc6) 60.Kc6 Ka7 61.Rb4

This is the position White was aiming for. Black can’t play 61...Ka6? 62.Ra4#. And if not, then White will finally be able to finish ahead of his opponent in the king race to the king’s wing.

61...Rh1 62.Kd6 Ka6 63.Ke6 Ka5 64.Rg4 Kb6 65.Kb6 Kc5 66.Kg6 Kd6 (66...Rd1?? 67.h5 Rd6+ holds out a little longer, but doesn’t change the assessment of the position) 67.h5 Ke7 68.h6 Kf6 69.h7 Rh3 70.Rg5, with 71.Rf5+ Ke7 72.Rh5+ — coming.

48...Kc6!

David Navara makes the right choice in refusing to recover one of his pawns.

49.Rf4 Kd6 50.Kd4 Ke6 51.Ke4 Rg1 (51...Ra1 is equivalent) 52.Kf3

The computer provides the proper assessment of this position (draw!), and shows the right and wrong moves; but it can’t judge and summarize the results obtained — that’s up to the commentator. It turns out that White wins if he can advance his pawn h5 supported by the king. Correspondingly, Black must either prevent the pawn from advancing, or allow it to advance, but only in a situation where the king can’t protect it, and White must play Rh4, opening the way for the opposing king to get to the h-pawn.

52...Ke7?
A subtle error, which should have led to a loss. The only correct move was 52...Rh1!, making it harder to play h4-h5.

53.Kg4 is met by 53...Rg1+! 54.Kh5 Rg8! =, and Black switches to “frontal attack mode.” For those unfamiliar with this technique, I would recommend studying my Endgame Manual (the section on “Pawn In Its Own Half of the Board,” from the chapter on rook endings).

And on 53.Kg2 Ra1 54.h5, White’s king is now too far away from the h-pawn, allowing Black to play 54...Ra5! 55.Rh4 (55.h6 Rh5 =) 55...Kf7!, when Black’s king blockades the pawn, and he draws without much difficulty.

54.Rf8 (instead of 54.h5) doesn’t cut it either after 54...Ke7! (but not 54...Ra3? 55.f3 Ke7 56.Rf4 Ra8 57.Kh3 Rh8 58.Kg4 Rg8+ 59.Kh5 Ke6 60.Kh6=, with the pawn still on f2, Black could save himself here by 60...Ke5) 55.Re3 Ra8! 55...Ke6? would lose to 56.h5 Ra5 57.h6, when 57...Rh5 could be met by 58.Rf3 56.Kh3 (56.h5 meets the same reply) 56...Rh8! =. Thanks to the “frontal attack,” Black succeeds in keeping the pawn at h4.

Curiously, the preceding diagram turns out to be a mutual zugzwang position. If it were Black’s move in that position (after 51...Rh1? 52.Kf3!), he loses, For example 52...Rh2 53.Kg4 Rg2+ 54.Kh3 Rg8 55.h5=, or 52...Ke5 53.Kg2! Ra1 54.Rh4=–. The most complex line is 52...Rg1!? 53.h5 Rg5 54.Rh4 Rg7 (after 54...Kf7, 55.h6 Kg8 doesn’t work, because of 56.Rg4, and 55...Rg8 is also hopeless, because of 56.h7 Rh8 57.Kg4) 55.h6 Rh7 56.Kg4 Kf7 57.Kh5 Kg8 58.f4

Black can only save himself if he can get his rook out to an active position, while not allowing his king to be cut off on the eighth rank. He hasn’t enough time for it: 58...Ra7 59.Rg4+ Kh8 (59...Kf7 60.Rg7+?) 60.f5 Kh7 61.f6=, or 58...Rh7 59.Kg4+! (59.Kg6 Rg7=+?) 59...Kh8 (59...Kh7 60.Kg4+! 60.Kg6 Rh7 61.Rh6! (but not 61.f5? Rxh6+) 61...Kg6 62.f5 Kg5=+ 63.Kh5=.

53.h5 Rg7

54.h6?

This overhasty pawn push spoils the win once and for all.

54.Rf5 Kg6 55.Kf4 suggests itself. For example, 55...Rg1 56.Rh1 Kg7 57.Rh4 Kg6 58.Ra6+ Kf7 59.Kf5=– here, the Black king is forced back to the eighth rank, and such positions are generally hopeless. White would have more complex problems to solve in the line 55...Rg2! 56.Rh1. The sole winning move is 57.Kg4!, and then 57...Rg2+ 58.Kh3 Rg8 59.Rf4 Kg6 60.Rg4! Rh6? 61.Kg3 Rg8+ 62.Kf2 Rh8 63.h6 Rh7 (otherwise 64.h7) 64.Kg3 Kf6 65.f4 Kg7 66.Kg4 (another possible way is 66.f5 Kg8 67.Rg4+ Kh8 68.Rf7 69.Rg6 Rg7 70.Kh4 Ra1 71.Rg4! Kh7 72.Rf4 +=) 66...Kg8 67.Kh5, and we have reached the position we know from
There’s also another way to win, beginning with 54.Rg4. Black has nothing better than 54…Rh7 (54…Kf7? 55.Rg5 Rh8 55…Kf6 56.Kg4) 56.Kg4 Kf7.

The exact same endgame (with the insignificant difference being that the pawn there was on f3) was won convincingly by Paul Keres against Alexei Sokolsky in the Chigorin Memorial Tournament of 1947.

57.Rf5+! Kg7 58.Kg5 (58.Ra5?? Kh7! 59.Ra7+! Kh6 60.Ra6+ Kh7 61. Kg5 Rg8+ 62.Rg6 Ra8 63.f4+ would have been strong, too) 58…Rg8! (the most stubborn) 59.Rf6! (the only move) 59…Kf6+(59…Ra8 60.h6+ Kg8 61.Kg6 Kh8 62.f4 Rg8+ 63.Kh5 Rg1 64.f8=R+ Kh7 65.Rf7+ Kh8 would only have extended the game somewhat, not changed the outcome) 60.Rg6 Ra8 61.f4 Ra1! (but not 62.f5? Rg1+! 63.Kf6 Ra1!, with a draw) 62…Rg1+! 63.Kf6 Rf1 64.f5 Rf2 65.Re5 Rh2 66.Re7+ Kh6 67.Re8 Kh7 68.Ke6 Re2+ 69.Kf7 Ra2 70.f6 Ra6 71.Ke7 Ra7 72.Kf8 Ra8 73.Rf7 Ra7 74.Re8 Ra1 75.Kc7 1-0.

54…Rh7! 55.Rd4 Kf7 56.Kg4 Kg8

57.Kg5

Perhaps 57.Kh5?! would have left White a few more practical chances: 57…Ra7 (57…Rf7?? 58.Rg4+ Kh8 59.f4 Rf8! =, or 59…Rf6! =) 58.Rg4+. In our analysis, we obtained this position with the pawn at f4, which was a win. But here, Black can draw: 58…Kh8! 59.f4 Ra5?? (59…Ra6! is also possible, threatening 60…Rxb6+; and if 60.Rg6, then 60…Ra1) 60. Rg5 Ra1 (Black only holds on thanks to the stalemate threat: on 61.f5, there comes 61…Rh1+ 62.Kg6 Rxb6+) 61.Re5 Rhl+ 62.Kg6 Rgl+ 63. Rg5 Rh1! (but not 63…Ra1? 64.f5+–), and once again White cannot advance the f-pawn because of the stalemate after 64…Rxb6+! 65.Kxb6.

57…Ra7 58.Rf4 Ra1 59.Re4 Ra5+ 60.Kf6 Kh7

The king has finally reached the square in front of the pawn, and the draw is now obvious.

61.Re8 Ra4 62.Kg5 Ra5+ 63.Kf6 Ra4 64.Rf8 Rf4+ 65.Kc7 Rxf8 66. Kxf8 Kxh6 67.f4 Kg6 68.f5+ Kxf5 ½-½